

# NURU NIGERIA

## 2020 SHORT TERM IMPACTS



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Principal author: Ray Marshall Center

Co-author: Nuru Nigeria

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3001 Lake Austin Blvd., Suite 3.200  
Austin, TX 78703 (512) 471-7891  
[www.raymarshallcenter.org](http://www.raymarshallcenter.org)



# INTRODUCTION

## OVERVIEW

Nuru Nigeria's mission is to eradicate extreme poverty in fragile rural areas to build communities resilient to violent extremism. The organization considers fragile states to continue to be a source of instability and relative deprivation in the world. Vulnerabilities in marginalized communities are ripe for exploitation by violent extremist groups and ideologies. Nuru Nigeria envisions a world in which all people live in an enabling environment with lasting, meaningful choices. Free of the burdens of vulnerabilities that threaten the stability and resilience of households and communities, people will be able to thrive and to exercise their agency.

Nuru Nigeria has been working with local leaders and farmers groups to build resilience in vulnerable communities in Northeastern Nigeria. The organization has also worked towards the first steps of supporting the creation of farmer cooperatives as a vehicle for revolving funds and financial sustainability. The ultimate goal is that local leaders and cooperatives develop the capacities and assets to design solutions within their communities to further support Nigerian civil society's journey to self-reliance, build stability, and reduce vulnerabilities within communities.

Nuru's work is currently taking place in one Local Government Area (LGA) of northern Adamawa State, Nigeria. Nuru Nigeria launched a program planning process in 2019 to design intervention activities with local communities. Initial activities were launched with 500 households (3,000 individuals) in 2019. Nuru Nigeria activities are delivered as a coordinated integrated intervention involving the following activities:

- Community mobilization
- Establishing farmer associations and organizations
- Training for local farmers on best agronomic practices
- Savings groups through financial inclusion programming on a mobile money platform
- Loans to increase crop yield and income through agricultural programmings such as vegetable permagardens, cash crop production of soybeans and groundnuts, and harvest and post-harvest activities (including the sale and training on the use of Purdue Improved Crop Storage PICS bags)
- Income diversification activities such as small ruminants fattening

- Market support services to provide access to good markets through aggregation, storage, and commercialization of farm produce so that farmers get fair prices and establish relationships with off-takers and processors through the collective bargaining power of groups

## METHODOLOGY

The goal of this impact evaluation is to provide insight into how Nuru programming in Nigeria impacts short-term outcomes. Follow-up data were collected in June 2020 from 230 intervention households residing in one Local Government Area in northern Adamawa State. This memo sets out the follow-up status of various short-term impact indicators and makes comparisons with baseline values for the same indicators and among the same panel of respondents.

This short term impact report is part of a four-year randomized control trial on resilience capacities running from 2019-2023. The baseline was gathered in June-July 2019, the mid-point is planned for 2021, and the endpoint is scheduled for 2023. The full study includes intervention and control groups with group assignment based on clustered randomization. During 2020 and 2022, the evaluation plan envisions interim timepoints to assess short term impacts of the program interventions among an intervention group only. The results presented in this short term impact report reflect the initial limited set of intervention activities implemented from July 2019 to June 2020. The four-year study design anticipates that increasing impact will be observed among intervention respondents over time.

Figure 1. Study timeline



## RESULTS

### FINANCIAL SAFETY NET

#### *Savings*

At baseline, only 13 percent of respondents reported that they have enough cash to save – this proportion increased significantly to 37 percent at follow-up. A higher proportion of respondents reported saving regularly (weekly, bi-weekly, or monthly) at follow-up; however, this increase was not statistically significant. There appeared to be some changes in the reported locations of savings; however, these changes were not statistically significant.

Figure 2. Frequency of savings

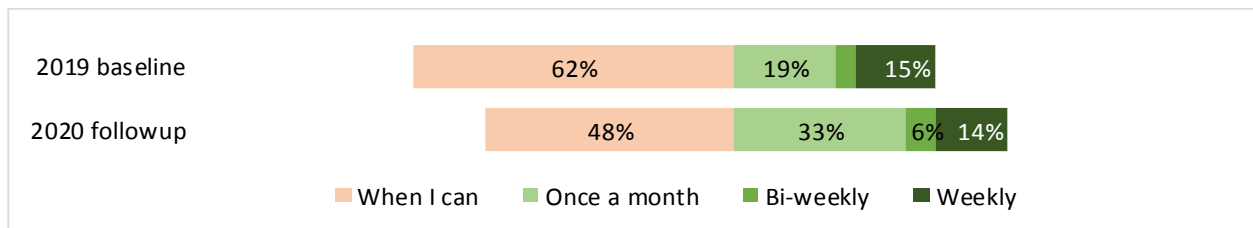
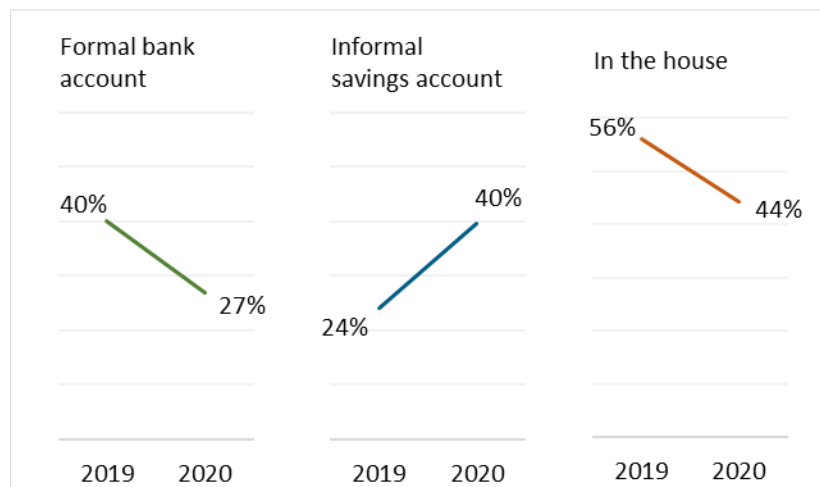
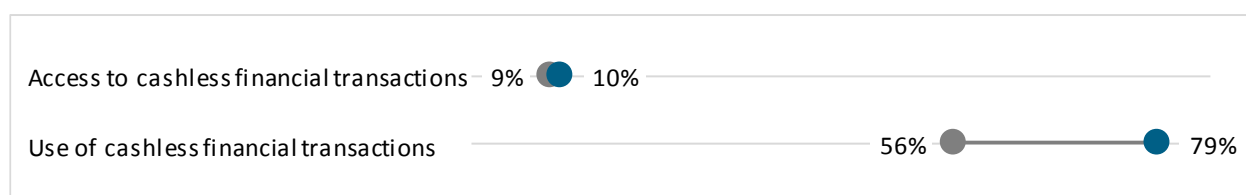


Figure 3. Location of savings



The proportion of respondents with access to cashless financial transactions remained unchanged at 10 percent. Among this small group of respondents with access, the proportion reporting use of cashless financial transactions increased.

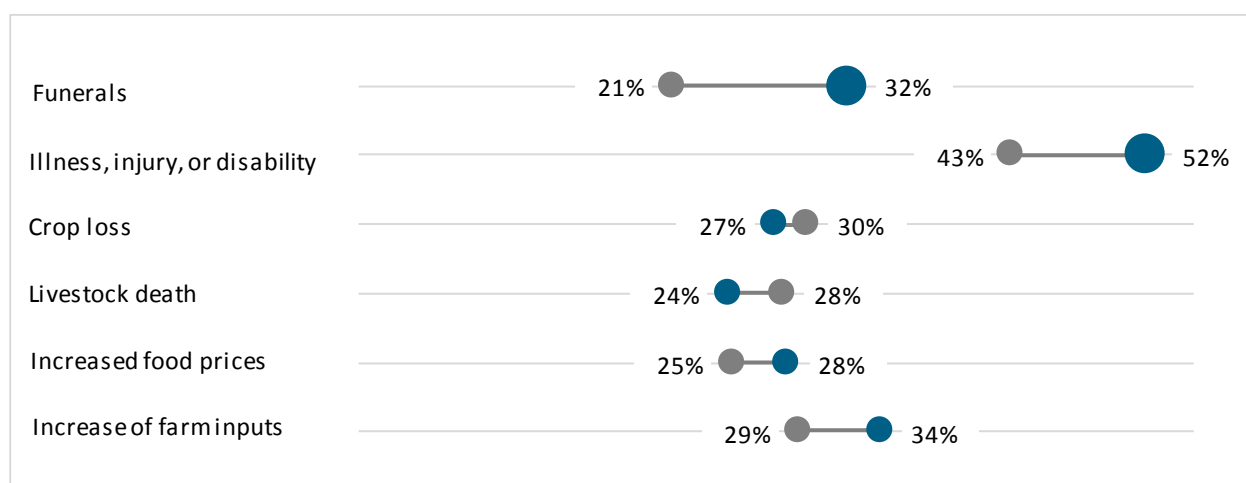
Figure 4. Change in access & use of cashless financial transactions from 2019 baseline to 2020 followup



### *Coping with emergencies*

Respondents' ability to cope with emergencies such as crop loss, livestock death, increased food prices, and increased farm input prices remained mostly unchanged since baseline, with about a quarter to a third reporting that they had enough savings to cope with these emergencies. However, significantly higher proportions of respondents reported having enough savings to cope with funerals and illness, injury, or disability at follow-up.

Figure 5. Change in ability to cope with an emergency from 2019 baseline to 2020 followup



## HARVEST

The vast majority of respondents reported engaging in crop farming in the past year (98 percent at baseline and 97 percent at follow-up). The average yields at baseline and follow-up for grains and legumes (reported in 50 kg bags) were similar (11.6 and 11.4 respectively). More than two-thirds of the intervention group reported selling cash crops in the past year at baseline (69 percent), and this remained mostly unchanged at follow-up (72 percent). The vast majority of respondents reported harvesting crops for consumption in the past year at both baseline and follow-up (96 percent).

Figure 4. Loss of cash crops

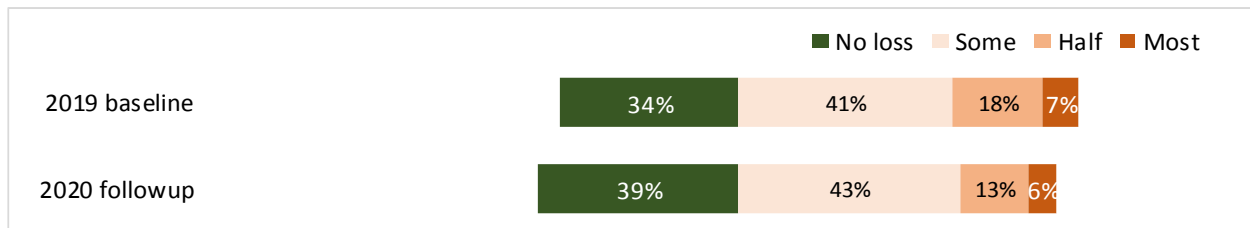
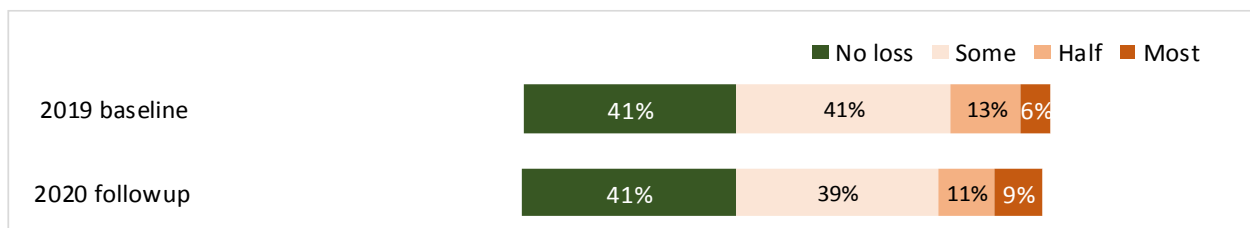
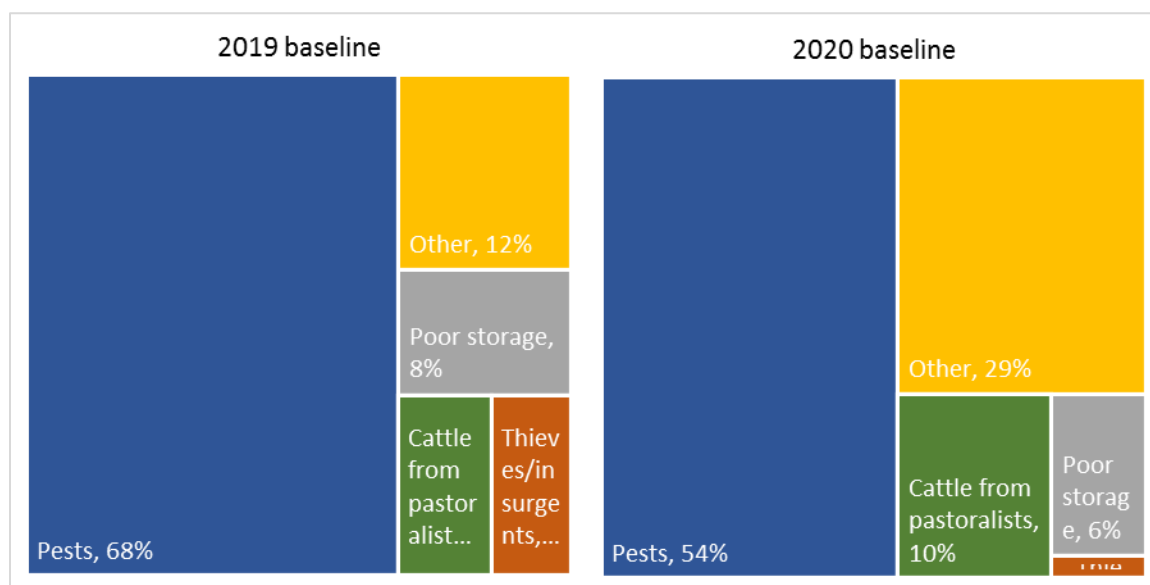


Figure 4. Loss of consumption crops



About a third of respondents reported no loss for cash crops at baseline; this proportion increased slightly to 39 percent at follow-up. At both baseline and follow-up, 41 percent of respondents reported no loss of consumption crops. While pests remained the most common reason for post-harvest loss, the proportion of respondents citing pests decreased from 68 percent at baseline to 54 percent at follow-up, while the proportion of respondents citing other reasons increased from 12 percent at baseline to 29 percent at follow-up.

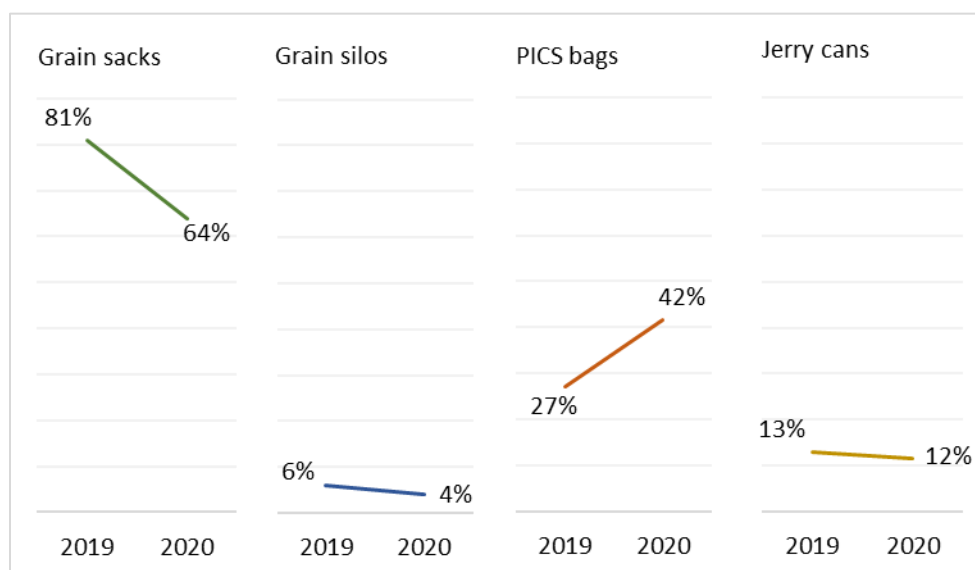
Figure 4. Reasons for post-harvest loss, patterns over time





At baseline, the majority of respondents (81 percent) reported storing grain in grain sacks while a little over a quarter of respondents reported storing grain in PICS bags (27 percent). The proportion of respondents who reported storing grain in PICS bags increased significantly at follow-up while the proportion of respondents who reported storing grain in grain sacks decreased significantly.

Figure 6. Grain storage methods, trends over time



## DIET & NUTRITION

Household dietary diversity is defined as the number of unique foods consumed by household members over a given period and is used to measure household food access.<sup>1</sup> The household dietary diversity score (HDDS) ranges from 0 to 12; it increased significantly from 4.6 at baseline to 5.6 at follow-up. Overall, significantly higher proportions of households reported consuming meat, oils and fats, and sweets while significantly lower proportions of households reported consuming vegetables, fruits, and eggs at follow-up.

Children's diets changed only slightly from baseline to follow-up. The proportion of respondents who reported that their children consumed meat and fish increased significantly at follow-up while the proportion of respondents who reported that their children consumed eggs decreased significantly at follow-up.

<sup>1</sup> Swindale, A. and Bilinsky, P. (2006). *Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide (v.2)*. Washington, D.C.: FHI 360/FANTA.

Figure 7. Change in adults' diet from 2019 baseline to 2020 followup

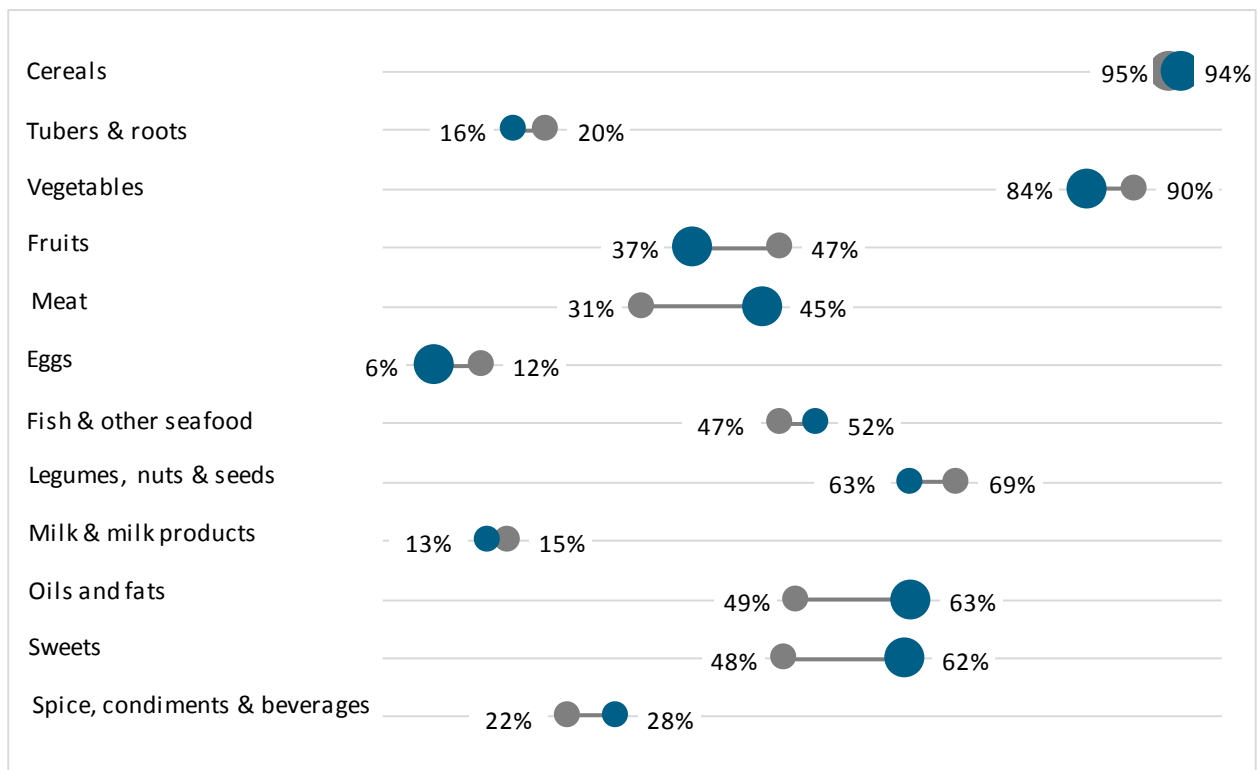
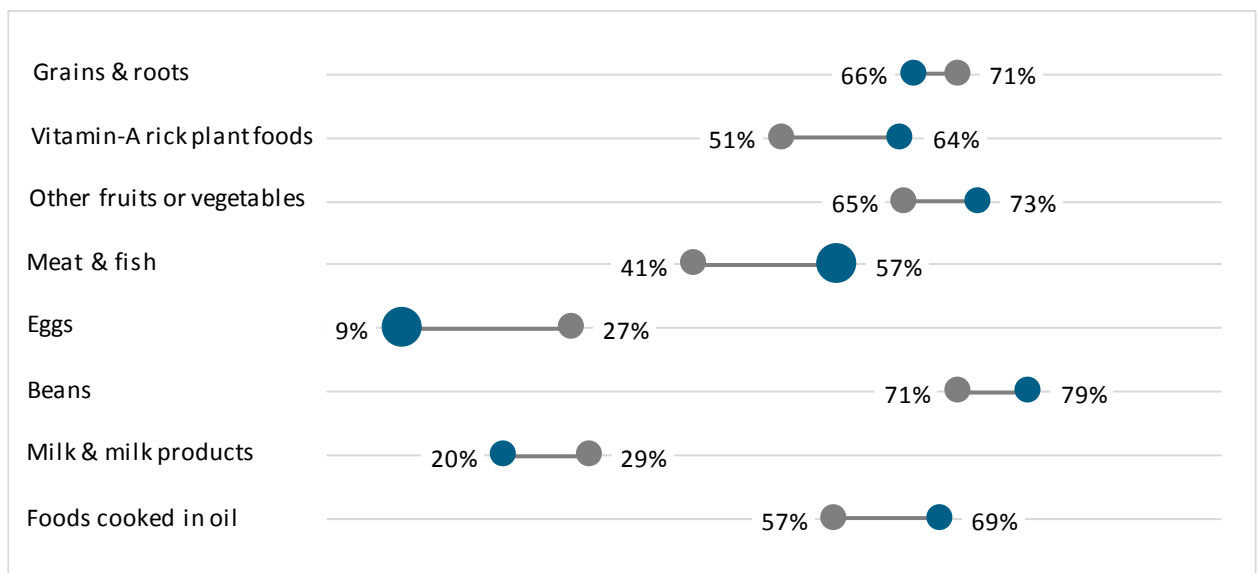


Figure 8. Change in children's diet from 2019 baseline to 2020 followup

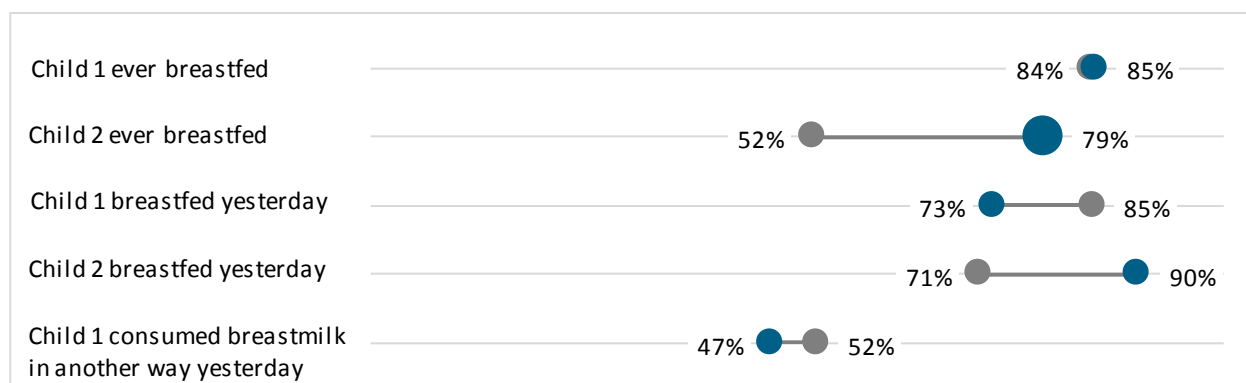


## BREASTFEEDING

Among respondents who reported having a child under 3 years of age in the household, a majority reported that a child had ever been breastfed (85 percent) at baseline - this remained

unchanged at follow-up. However, among respondents who reported having another child under 3 years of age in the household, the proportion reporting that the other child had ever been breastfed increased significantly from 52 percent to 79 percent.

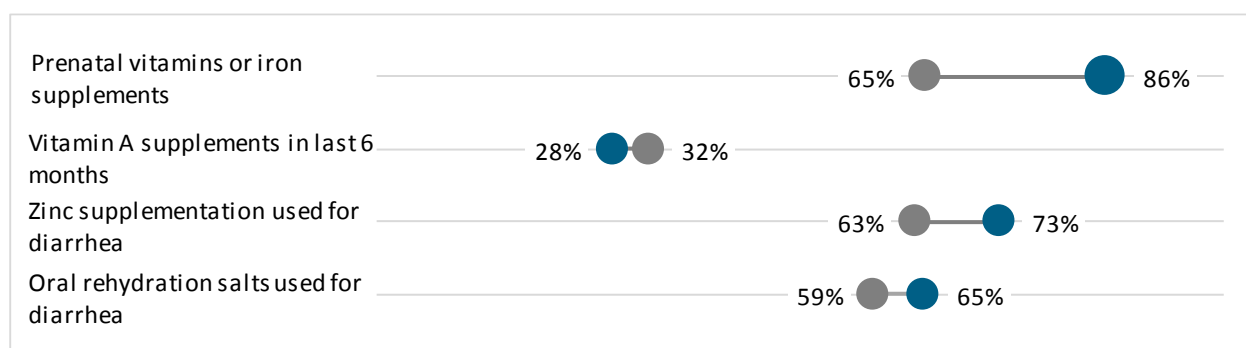
Figure 9. Change in breastfeeding behaviors from 2019 baseline to 2020 followup



## HEALTH

Among households in which someone had given birth in the past year, the proportion of respondents who reported consuming prenatal vitamins or iron supplements increased significantly from 65 percent at baseline to 86 percent at follow-up. A little less than a third of respondents reported taking a Vitamin A supplement in the past six months at baseline - this remained unchanged at follow-up. Among households in which someone had experienced diarrhea in the past six months, the proportion of respondents who reported using zinc supplementation or oral rehydration salts appeared to increase; however, these changes were not statistically significant.

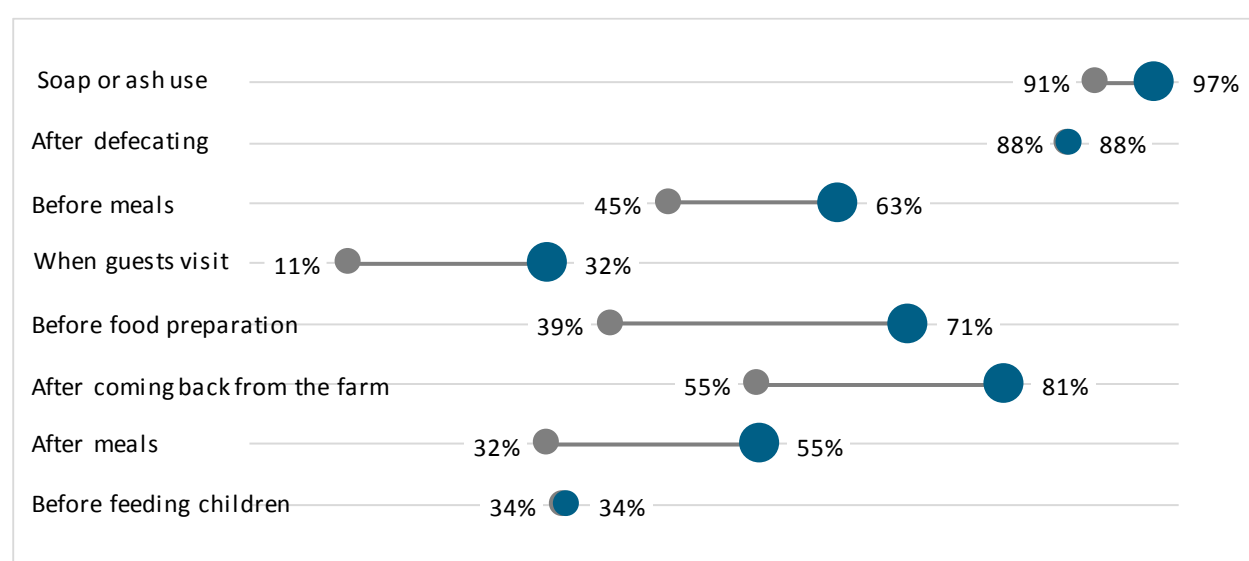
Figure 10. Change in health behaviors from 2019 baseline to 2020 followup



## HYGIENE

The vast majority of respondents reported using soap or ash when cleaning their hands after defecating at baseline (88 percent) – this remained unchanged at follow-up. Compared to baseline, significantly higher proportions of respondents reported using soap or ash to clean their hands before meals, when guests visited, before food preparation, after returning from the farm, and after meals. The proportion of respondents using soap or ash before food preparation saw the largest increase. Only a third of respondents reported using soap or ash to clean their hands before feeding children – this remained unchanged at follow-up.

Figure 11. Change in soap use behaviors from 2019 baseline to 2020 followup

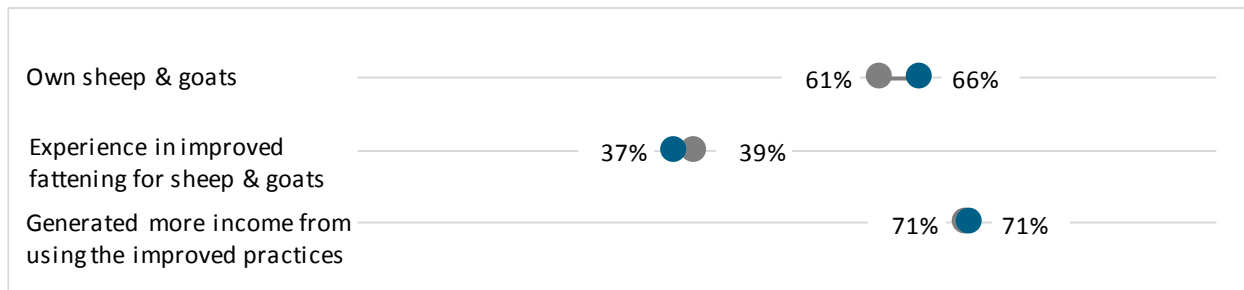


## LIVESTOCK

### *Sheep and goats*

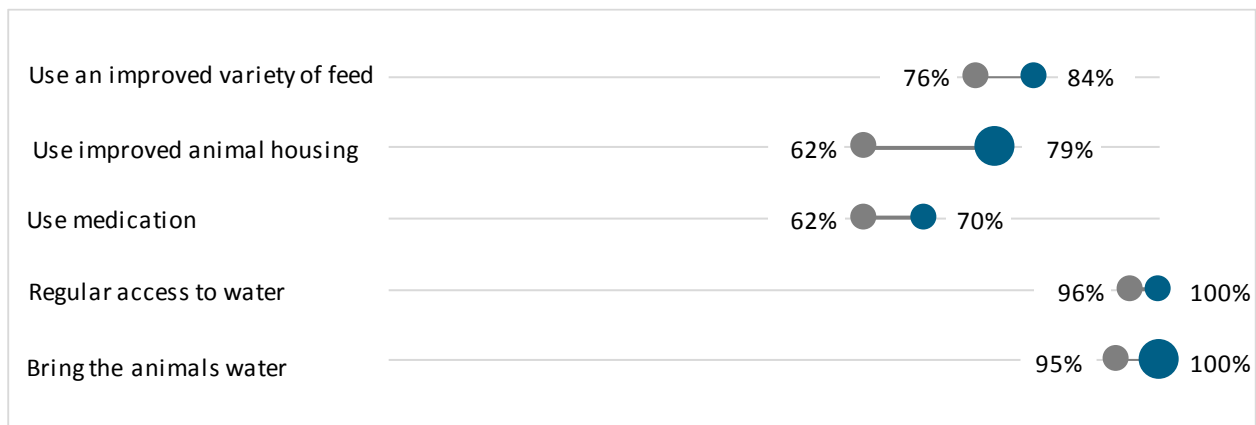
About two-thirds of respondents reported owning sheep and goats at both baseline and follow-up. Among respondents who owned sheep and goats, over a third reported having experience with improved fattening practices at both baseline and follow-up. Nearly three-quarters of respondents who owned sheep and goats and had experience with improved fattening practices reported generating more income from using the improved practices for sheep and goats at both baseline and follow-up.

Figure 12. Change in sheep and goats experience from 2019 baseline to 2020 followup



Among respondents who owned sheep and goats and had experience with improved fattening practices, the proportions who reported using improved practices were already high at baseline. The proportions of respondents who reported using improved animal housing for sheep and goats and bringing sheep and goats water at follow-up increased significantly at follow-up.

Figure 13. Change in sheep and goats practices from 2019 baseline to 2020 followup



### Cattle

Only 4 percent of baseline respondents and 7 percent of follow-up respondents reported owning cattle. Due to the small sample sizes, further analyses were not conducted.



## CONCLUSION

The follow-up results provide the program team with information regarding program progress within the implementation period. The follow-up survey revealed that saving culture among Nuru farmers has improved from 13 percent at baseline to 37 percent at follow-up, indicating that more farmers now have enough cash to save to cope with emergencies such as illness, injury, or disability, crop loss, livestock death, increased food prices, and increased farm input. While pests remained the most common reason for farmers' postharvest loss, follow-up results indicate that the number of farmers that store their grains in PICS bags has increased significantly while the use of sacks has decreased. The use of PICS bags could potentially increase Nuru farmers' incomes. The follow-up survey also found that the current food diet intake in the household has improved slightly amongst most farmers and that the dietary needs of children in households are slowly improving. Finally, focusing on improving crop variety and livestock fattening is a plausible approach to ensuring the availability of food choices and improved nutrition for rural household farmers in the target areas, as evidenced by farmer participants in this study.